P/N 7109M65G01, NSN 5342-01-160-9482NY
Mount Assy, Resilient

QUALIFICATION REQUIREMENTS FOR PROPULSION CRITICAL APPLICATION ITEMS

1. APPLICATION: These requirements apply to all critical application items with the exception of those classified as flight safety critical parts, critical safety items, flight safety parts, fracture critical parts, or durability critical parts.

2. PURPOSE:

2.1 This document establishes the minimum requirements, which prospective offerors must satisfy in order to obtain pre-award engineering source approval for the specified applications.

2.2 Engineering source approval on items is valid for only five years from date of approval for items with propulsion system applications. Subsequent to that time re-qualification may be required if the offeror has not satisfactorily produced the item within the last three years. TICLA shall contact the ESA when re-qualification is required since the requirements will vary with the circumstances, i.e., whether the offeror is currently making similar or more complex items.

2.3 Qualification Requirements were established prior to October 19, 1984. This item qualifies under FAR 9.206-1(a)(2) and the requirements for FAR 9.202(a) are not applicable. Therefore, Justification of Qualification Requirements (JQR) are not required.

3. DEFINITIONS:

Critical Application Item (DLAI 3200.1) - An item that is essential to weapon system performance or operation, or the preservation of life or safety of operating personnel, as determined by the Military Services.

Engineering Source Authority - The service engineering authority for technical acquisition support and cognizant engineering activity for the weapon system in which the part is used.

Original Equipment Manufacturer (OEM) - Term typically applied to the source responsible for the original design and development of a product or system. In this case it shall refer to sources primarily responsible for the design and development of an aircraft gas turbine engines, for a US DOD activity or a NATO country, e.g., Pratt & Whitney, General Electric, Rolls Royce, etc.

Production Quantities - Quantities which establish a reasonable level of confidence in a prospective source's ability to consistently produce components whose integrity is

equivalent to that exhibited by components which originally passed substantiation testing. As a minimum it shall be considered representative of several production lots or greater quantities commensurate with those specified in current solicitations or OC-ALC annual buy projections and shall be exclusive of quantities produced in experimental or developmental programs.

Critical Process - A process which is capable of producing alterations in the material structure of a component which cannot normally be evaluated without destructive testing and which can compromise the mechanical properties and ultimately the reliability of the component. Processes which are considered to be significant include but are not limited to forging, casting, heat treat, fusion welding, resistance welding, furnace brazing, peening, coating, non-conventional machining (laser machining, electro-discharge machining, electro-chemical machining, chem milling, etc.) grinding titanium alloys, cleaning titanium alloys, and non-destructive inspection.

Non-destructive Inspection - In the context of this document shall refer to inspections performed on vital characteristics which cannot be measured directly without rendering the part unfit for use. These include but or not limited to fluorescent penetrant inspection, radiographic inspection, magnetic particle inspection, ultrasonic inspection, eddy current inspection, and/or holographic inspection.

4. CONTRACTOR RESPONSIBILITY STANDARDS (FAR 9-104):

4.1 General standards as specified in FAR 9-104.1 apply

4.2 Special standards as specified in FAR 9-104.2 apply

4.2.1 The specific special standards to be applied are determined by the conditions which form the basis of the source approval request submitted by the offeror. There are three conditions for submission of source approval requests. These conditions are categorized as follows:

1) Category I offeror - A manufacturing source, which in conjunction with their subvendors, has performed all requisite processes on the same item for the OEM.

2) Category II offeror - A manufacturing source, which in conjunction with their subvendors, has performed all requisite processes on a similar item for an OEM or DOD.

3) Non-manufacturing source – A source offering new manufactured items to be produced by a third party manufacturing source(s) under contract must satisfy the requirements specified herein for non-manufacturing sources. Non-manufacturing sources offering surplus will be evaluated using procedures specified in procedures for handling of surplus. ESA approval of non-manufacturing sources is valid only for instant procurements only. ESA approval shall be obtained for each subsequent

procurement on a case-by-case basis. All non-manufacturing sources must be approved by the ESA prior to contract award, each time procurement is made for a critical application item.

5. PROOF OF CAPABILITY:

5.1 The Offeror shall submit proof that they, in conjunction with their subvendors, have manufactured production quantities of the same item (Category I offerors) for the OEM, or a similar component for an OEM or the DOD (Category II offerors) within the last three years for components with propulsion system applications. **Note**: Failure to qualify as a Category I or II offeror shall result in disapproval on components with propulsion system applications

6. DOCUMENTATION REQUIREMENTS:

6.1 The documentation specified herein is required to substantiate proof of capability. Failure to provide any of the specified documentation shall be grounds for disapproval of the offeror.

6.2 Categories I and II:

6.2.1 Brochures or synopsis of the company's capabilities. Identify if the company seeking approval is a non-manufacturing source or the actual manufacturer.

6.2.2 Identification of all subvendors of major subcomponents and critical processes, previously employed in the production of the same item (Category I Offerors) or "similar component(s) (Category II offerors) including the specific operations and/or subcomponents provided by each subvendor and their address.

6.2.3 Proof from the company Barry Controls, cage code 81860, that they would supply SOURCE CONTROLLED part number 7041M53P01 to produce the end assembly to requesting source for the purpose of a government contract.

6.2.4 Identification of all subvendors of major subcomponents and critical processes to be employed in the production of the same item and their address. The Offeror shall substantiate that all vendors of critical processes as defined in Section 3 of this document are OEM-approved sources.

6.2.5 The Offeror shall provide latest OEM quality rating(s), and evidence substantiating that their quality system satisfies one of the following: 1) the requirements of MIL-I-45208 plus paragraphs 3.1 - 3.5, 5.1, 5.2, 6.1, and 6.2 of MIL-Q-9858, or the NATO equivalent, as certified by DCMAO or the appropriate government quality assurance representative, or 2) the requirements of IS0 9002 as certified by a Registrar accredited by American National Standards Institute (ANSI) or the International

Standards Organization in Geneva, Switzerland, or 3) an equivalent system certified by an OEM. The Offeror for ISO certifications shall also substantiate the accreditation of the Registrar.

6.2.6 The Offeror shall provide evidence that their calibration system is in compliance with ISO 10012-1 and ANSI/NCSL Z540-1, and that calibration standards are traceable to NIST standards.

6.2.7 The Offeror shall provide evidence that the quality assurance system and available expertise which currently exists within the Offeror's facility, is capable of establishing and maintaining effective process control, and otherwise ensuring the ongoing quality of all significant processes performed in-house or by sub vendors toward the manufacture of the same item. Evidence shall comply with the following criteria:

6.2.7.1 A copy of the latest document(s) which describe and govern the quality assurance system in effect at the Offeror's facility(ies) (i.e. Company Quality Manual).

6.2.8 It is highly recommended that all offerors submit all Source Approval Requests (SARs) in a binder to preclude the loss of contractor data in handling. A hard or semi-hard cover notebook form (i.e. a three-ring binder or similar product), with a table a contents and tabs corresponding to the table of contents is preferable. This will significantly reduce the turn-around time for engineering evaluation as well as reduce the likelihood of oversight or loss of valuable data that could have a significant bearing on the outcome of the evaluation.

6.3 Category I Offerors:

6.3.1 A complete set of legible drawings for all assemblies, details, and sub-components for the same item.

6.3.2 A complete set of all specifications for all material and manufacturing processes identified on the drawings for the same part and subcomponents thereof. The offeror may submit the top page of each specification showing the revision or DCMC certification in lieu of providing the specifications in their entirety.

6.3.3 Substantiation of possession of material structure acceptance/rejection criteria referenced on drawings, material specifications, and in process specifications, e.g., Material Control Laboratory (MCL) standards for P&W components. This data is not available in the Government repository.

6.3.4 A copy of the manufacturing process sheets employed in the production of the same item for the OEM, which define all critical process parameters. Summary of manufacturing operations sheets, travelers, or routing sheets are not acceptable in lieu of manufacturing process sheets, except for some sheet metal components. In the case of the latter routing sheets, which define process sequence, forming tooling, non-

conventional machining schedules, weld schedules, and braze schedules shall be provided. All schedules and technical control documents referenced in the manufacturing process sheets which specify process-operating parameters shall be included. In all cases where an operation is governed by software i.e., numerically controlled or automated operations a hard copy excerpt identifying manufacturing process operating parameters must be provided. Manufacturing process sheets shall remain confidential and may be stamped "proprietary" at the discretion of the offeror. Failure to provide detailed process sheets shall constitute grounds for disapproval.

6.3.5 Copies of purchase orders from OEM to offerors for the same item, which define quantities ordered and all technical conditions or restrictions imposed by the OEM. Copies of the most recent shipping documents applicable to the purchase order should also be provided. Shipping documents shall be stamped appropriately by the OEM to indicate full release where on-site acceptance is specified by the purchase order. In addition, if the approval item or the similar item was manufactured for P&W, the P&W Requirements Control Card and Quality Assurance Document should be provided.

6.3.6 A summary of quality deficiencies experienced in manufacturing the part for which approval is sought, during the last two years of production. The summary shall include but not be limited to all Material Review Board (MRB) actions, Quality Deficiency Reports (QDRs), Laboratory Quality Review Orders (LQROs), Supplier Report of Nonconformance (SRONs), Material Deficiency Reports (MDRs) and any other pertinent documentation as well as the coordination of the President and the Quality Assurance Manager. Coordination of the government quality assurance representative shall be included as well if government source inspection was conducted. Actions taken to resolve deficiencies identified including repair, rework or replacement of parts as well as the source primarily responsible for initiating, developing, and implementing corrective actions and the status thereof must also be provided.

6.3.7 Identification of all proposed changes to the manufacturing process sheets submitted by offerors as proof of capability. This requirement applies regardless of whether are not they are considered to be significant changes by the offeror.

6.3.8 Copy of inspection method sheets used in manufacturing and final inspection, which as a minimum defines all characteristics inspected, characteristic location on the blueprint, and the instrumentation used in the inspection. The inspection method sheets shall provide a means of a 100% inspection on each part produced unless otherwise allowed by an approved sampling or statistical process control plan, which must be provided.

6.3.9 A specific description of value added by the OEM to the same item including but not limited to performance of manufacturing processes or inspections, supply of raw material, forgings, castings, or subcomponents, quality assurance surveillance of subvendors of significant processes, use of OEM tooling, fixtures, gages, or inspection master hardware, and use of OEM manufacturing process sheets or other process related data not referenced on component drawings. The Offeror shall demonstrate capability to fulfill " value added " by the OEM on the same item as determined by the cognizant engineering activity for the weapon system.

6.4 Category II Offerors:

6.4.1 A complete set of legible drawings for all assemblies, details, and sub-components for the same item and the similar item. ESA will determine similarity acceptability.

6.4.2 A complete set of all specifications for all material and manufacturing processes identified on the drawings for the similar parts and subcomponents thereof.

6.4.3 A top copy of the cover sheet for all material manufacturing processes identified by the drawings for the same parts and subcomponents thereof. Will include specification number, revision and date.

6.4.4 Substantiation of possession of material structure acceptance/rejection criteria referenced on drawings, material specifications, and in process specifications, e.g., Material Control Laboratory (MCL) standards for P&W components. This data is not available in the Government repository.

6.4.5 A copy of the manufacturing process sheets employed in the production of the similar item for the OEM or DOD, which define all critical process parameters. Summary of manufacturing operations sheets, travelers, or routing sheets are not acceptable in lieu of manufacturing process sheets, except for some sheet metal components. In the case of the latter routing sheets that define process sequence, forming tooling, non-conventional machining schedules, weld schedules, and braze schedules shall be provided. All schedules and technical control documents referenced in the manufacturing process sheets which specify process operating parameters shall be included. In all cases where an operation is governed by software i.e., numerically controlled or automated operations a hard copy excerpt identifying manufacturing process operating parameters must be provided. Manufacturing process sheets shall remain confidential and may be stamped "proprietary" at the discretion of the offeror. Failure to provide detailed process sheets shall constitute grounds for disapproval.

6.4.6 Identification of all manufacturing operations to be employed in the production of the item for which the offeror is seeking approval, including the specific sequence in which the operations will be performed.

6.4.7 Copies of purchase orders from OEM to offerors for the similar item which define quantities ordered and all technical conditions or restrictions imposed by the OEM. Copies of the most recent shipping documents applicable to the purchase order should also be provided. Shipping documents shall be stamped appropriately by the OEM to indicate full release where on-site acceptance is specified by the purchase order. In addition, if the approval item or the similar item was manufactured for P&W, the P&W Requirements Control Card and Quality Assurance Document should be provided. Also, if similar items were produced for the government, copies of the signed DD Form 250 showing government acceptance of parts produced should be included, as well as a copy of the contract.

6.4.8 Identification of the specific differences between the similar items and the item for which the company is seeking approval to manufacture.

6.4.9 A summary of quality deficiencies experienced in manufacturing the similar part(s) during the last two years of production. The summary shall include but not be limited to all Material Review Board (MRB) actions, Quality Deficiency Reports (QDRs), Laboratory Quality Review Orders (Liquors), Supplier Report of Nonconformance (SRONs), Material Deficiency Reports (MDRs) and any other pertinent documentation as well as the coordination of the President and the Quality Assurance Manager. Coordination of the government quality assurance representative shall be included as well if government source inspection was conducted. Actions taken to resolve deficiencies identified including repair, rework or replacement of parts as well as the source primarily responsible for initiating, developing, and implementing corrective actions and the status thereof must also be provided.

6.4.10 Copy of inspection method sheets used in manufacturing and final inspection of the similar item, which as a minimum define all characteristics inspected, characteristic location on the blueprint, and the instrumentation used in the inspection. The inspection method sheets shall provide a means of 100% inspection on each part produced unless otherwise allowed by an approved sampling or statistical process control plan that must be provided.

6.4.11 A specific description of value added by the OEM or DOD to the similar part(s) including but not limited to performance of manufacturing processes or inspections, supply of raw material, forgings, castings, or subcomponents, quality assurance surveillance of subvendors of significant processes, use of OEM or DOD tooling, fixtures, gages, or inspection master hardware, use of OEM/DOD manufacturing process sheets or other process related data not referenced on component drawings. The Offeror shall demonstrate capability to fulfill "value added" by the OEM on the item for which source approval is sought, as determined by the cognizant engineering activity for the weapon system.

6.5 Non-manufacturing Sources other than surplus dealers:

6.5.1 Brochures or synopses of the company's capabilities if not previously provided. Identify if the company seeking approval is a non-manufacturing source.

6.5.2 Identify the source of manufacture and provide evidence that they are currently approved by the ESA for the approval item. Sources which have not produced the item in the last three years are subject to re-qualification, the extent of which is dependent upon the extent of process and facility changes made during that time and the vendor's quality history. In the event they are not a formally approved source an approval request shall be provided substantiating their capability in accordance with 6.3 or 6.4 of this document as applicable.

6.5.3 The Offeror shall identify all sources to be used by the manufacturer for

critical processes as defined in paragraph 3 of this document, including themselves, and substantiate that they are currently approved by the ESA or the OEM per 6.2.3 of this document.

6.5.4 The Offeror shall provide identification of all manufacturing operations to be employed in the manufacture of the item, including the operation sequence.

6.5.5 The quality of the end item provided to the Government is the responsibility of the Offeror and the Offeror shall demonstrate the capability to provide the necessary quality assurance surveillance to insure the ongoing integrity of the end product in accordance with the requirements of paragraph 6.2.6 of this document.

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